## CLAIMS

1. A III-nitride semiconductor light emitting device comprising:

a plurality of III-nitride semiconductor layers including an active layer emitting light by recombination of electrons and holes, the plurality of III-nitride semiconductor layers having a p-type III-nitride semiconductor layer at the top thereof,

a $Si_aC_bN_c$ ($a\geq0,b>0,c\geq0,a+c>0$) layer grown on the p-type III-nitride semiconductor layer, the $Si_aC_bN_c$ ($a\geq0,b>0,c\geq0,a+c>0$) layer having an n-type conductivity and a thickness of 5Å to 500Å for the holes to be injected into the p-type III-nitride semiconductor layer by tunneling, and

a p-side electrode formed on the $Si_aC_bN_c$ ($a\geq0,b>0,c\geq0,a+c>0$) layer.

2. The III-nitride semiconductor light emitting device of claim 1, wherein the doping concentration of the $Si_aC_bN_c$ ($a\geq0,b>0,c\geq0,a+c>0$) layer is in a range from $1x10^{18}$ to $1x10^{22}$ atoms/$cm^3$.

3. The III-nitride semiconductor light emitting device of claim 1, wherein the growth temperature of the $Si_aC_bN_c$ ($a\geq0,b>0,c\geq0,a+c>0$) layer is in a range from 600°C to 1200°C.

4. The III-nitride semiconductor light emitting device of claim 1, wherein the p-side electrode is made of nickel and gold.

5. The III-nitride semiconductor light emitting device of claim 1, wherein the p-side electrode is made of ITO(Indium Tin Oxide).

6. The III-nitride semiconductor light emitting device of claim 1, wherein the p-side electrode is made of at least one selected from the group consisting of nickel, gold, silver, chromium, titanium, platinum, palladium, rhodium, iridium,

aluminum, tin, ITO(Indium Tin Oxide), indium, tantalum, copper, cobalt, iron, ruthenium, zirconium, tungsten, lanthanum and molybdenum.

7. A III-nitride semiconductor light emitting device comprising:

a plurality of III-nitride semiconductor layers including an active layer emitting light by recombination of electrons and holes, the plurality of III-nitride semiconductor layers having a p-type III-nitride semiconductor layer at the top thereof,

a $Si_aC_bN_c$ ($a\geq0,b>0,c>0$) layer grown on the p-type III-nitride semiconductor layer, and

a p-side electrode formed on the $Si_aC_bN_c$ ($a\geq0,b>0,c>0$) layer.

8. The III-nitride semiconductor light emitting device of claim 7, wherein the growth temperature of the $Si_aC_bN_c$ ($a\geq0,b>0,c>0$) layer is in a range from 600°C to 1200°C.

9. The III-nitride semiconductor light emitting device of claim 7, wherein the doping concentration of the $Si_aC_bN_c$ ($a\geq0,b>0,c>0$) layer is in a range from $1x10^{18}$ to $1x10^{22}$ atoms/$cm^3$.

10. The III-nitride semiconductor light emitting device of claim 7, wherein the $Si_aC_bN_c$ ($a\geq0,b>0,c>0$) layer has a thickness of 5Å to 500Å.

11. The III-nitride semiconductor light emitting device of claim 7, wherein the $Si_aC_bN_c$ ($a\geq0,b>0,c>0$) layer has a p-type conductivity.

12. The III-nitride semiconductor light emitting device of claim 7, wherein the $Si_aC_bN_c$ ($a\geq0,b>0,c>0$) layer has an n-type conductivity.

13. The III-nitride semiconductor light emitting device of claim 7, wherein the p-side electrode is made of nickel and gold.

14. The III-nitride semiconductor light emitting device of claim 7, wherein the p-side electrode is made of ITO(Indium Tin Oxide).

15. The III-nitride semiconductor light emitting device of claim 7, wherein the p-side electrode is made of at least one selected from the group consisting of nickel, gold, silver, chromium, titanium, platinum, palladium, rhodium, iridium, aluminum, tin, ITO(Indium Tin Oxide), indium, tantalum, copper, cobalt, iron, ruthenium, zirconium, tungsten, lanthanum and molybdenum.